Dissolved Lead
Boiler Blowdown
Outfall 001 (Grate)
VA0090131

Complies with e-mail dated 1/29/03 (QLs & USE OF DATA IN STATS.EXE)

QL per Attachment A = 0.50

Uncensored (>QL) Data	Censored ("<") Data		Intermediate Values
12	< \ 200		2
2	< \ 10		
2	< \ 10		
Value	< \ 10		
Value	< \ 10		
Value	< \ 1	<= USE	1
Value	< \ 2	<= USE	2
Value	< \ 2	<= USE	2
Value	< \ 2	<= USE	2
Value	< \ 5		
	< \ 50		
			1
			1.75

PROCEDURE

STATS Run #1:

Run STATS.exe using: QL = 0.5 and
Uncensored data in yellow cells.
No Limit Required: Analysis concluded - no limit required
Limit Required: Procede to STATS Run #2

STATS Run #2:

Run STATS.exe using QL = 1.75 and
Uncensored data in yellow cells and
specified Censored data in green cells.
No Limit Required: Analysis concluded - no limit required
Limit Required: Include both runs of STATS in Fact Sheet and limit in Draft Permit

Dissolved Zinc
Boiler Blowdown
Outfall 001 (Grate)
VA0090131

Complies with e-mail dated 1/29/03 (QLs & USE OF DATA IN STATS.EXE)

QL per Attachment A = 2.00

Uncensored (>QL) Data	Censored ("<") Data	
200	< \10	<= USE
300	< \10	<= USE
860	< \20	
80	< \20	
10	< Value	
30	< Value	
20	< Value	
26	< Value	
25	< Value	
Value	< Value	

Intermediate Values
10
10
10
10
10

PROCEDURE

STATS Run #1:

Run STATS.exe using: QL = 2 and
Uncensored data in yellow cells.
No Limit Required: Analysis concluded - no limit required
Limit Required: Procede to STATS Run #2

STATS Run #2:

Run STATS.exe using QL = 10 and
Uncensored data in yellow cells and
specified Censored data in green cells.
No Limit Required: Analysis concluded - no limit required
Limit Required: Include both runs of STATS in Fact Sheet and limit in Draft Permit

Dissolved Zinc
Boiler Blowdown
Outfall 001 (Plant)
VA0090131

Complies with e-mail dated 1/29/03 (QLs & USE OF DATA IN STATS.EXE)

QL per Attachment A = 2.00

Uncensored (>QL) Data	Censored ("<") Data		Intermediate Values
14	< \20		14
38	< \20		
Value	< \10	<= USE	10
Value	< \10	<= USE	10
Value	< \10	<= USE	10
Value	< Value		
Value	< Value		
Value	< Value		
Value	< Value		
Value	< Value		
			10
			10

PROCEDURE

STATS Run #1:

Run STATS.exe using: QL = 2 and
Uncensored data in yellow cells.

No Limit Required: Analysis concluded - no limit required

Limit Required: Procede to STATS Run #2

STATS Run #2:

Run STATS.exe using QL = 10 and
Uncensored data in yellow cells and
specified Censored data in green cells.

No Limit Required: Analysis concluded - no limit required

Limit Required: Include both runs of STATS in Fact Sheet and limit in Draft Permit

Dissolved Zinc
Bench Sheet Data –
Outfall 001 (Grate)
Uncensored Data;
STATS Run #1
VA0090131 – '09 RE1

1/9/2009 10:30:18 AM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Zinc
Chronic averaging period = 4
WLAa = 97
WLAc =
Q.L. = 2.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 9
Expected Value = 172.333
Variance = 10691.5
C.V. = 0.6
97th percentile daily values = 419.358
97th percentile 4 day average = 286.726
97th percentile 30 day average= 207.843
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 97
Average Weekly limit = 97
Average Monthly LImit = 97

The data are:

200
300
860
80
10
30
20
26
25

Dissolved Zinc
Bench Sheet Data –
Outfall 001 (Grate)
Censored & Uncensored
Data; STATS Run #2
VA0090131 – '09 REI

2/20/2009 1:56:53 PM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Zinc
Chronic averaging period = 4
WLAa = 97
WLAc =
Q.L. = 10
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 11
Expected Value = 19.3739
Variance = 135.125
C.V. = 0.6
97th percentile daily values = 47.1448
97th percentile 4 day average = 32.2341
97th percentile 30 day average= 23.3659
< Q.L. = 2
Model used = BPJ Assumptions, Type 1 data

No Limit is required for this material

The data are:

200
300
860
80
10
30
20
26
25
0
0

Dissolved Zinc
Bench Sheet Data —
Outfall 001 (Plant)
Uncensored Data
VA0090131 — '09 REI

1/9/2009 9:11:18 AM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Zinc
Chronic averaging period = 4
WLAa = 97
WLAc =
Q.L. = 2.0
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 2
Expected Value = 26
Variance = 243.36
C.V. = 0.6
97th percentile daily values = 63.2688
97th percentile 4 day average = 43.2585
97th percentile 30 day average= 31.3573
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material.

The data are:

14
38

*Note: STATS was not run using both censored and uncensored data for Dissolved Zinc (Plant), as STATS run with uncensored data showed that a limit was not necessary. Analysis concluded.

Dissolved Copper
Bench Sheet Data -
Outfall 001 (Grate)
VA0090131-09 REI

1/9/2009 10:48:12 AM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Copper
Chronic averaging period = 4
WLAa = 11
WLAc =
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 14
Expected Value = 147.886
Variance = 128855.
C.V. = 2.427292
97th percentile daily values = 768.678
97th percentile 4 day average = 563.162
97th percentile 30 day average= 271.163
< Q.L. = 0
Model used = lognormal

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 11
Average Weekly limit = 11
Average Monthly Limit = 11

The data are:

120
320
710
40
40
14
5
17
58
23
50
370
110
23

Dissolved Copper
Bench Sheet Data –
Outfall 001 (Plant)
VA0090131 - '09 RE1

1/9/2009 10:49:10 AM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Copper
Chronic averaging period = 4
WLAa = 11
WLAc =
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 7
Expected Value = 119
Variance = 5097.96
C.V. = 0.6
97th percentile daily values = 289.576
97th percentile 4 day average = 197.991
97th percentile 30 day average= 143.520
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 11
Average Weekly limit = 11
Average Monthly LImit = 11

The data are:

41
390
130
31
74
89
78

Dissolved Lead Bench Sheet Data — Outfall 001 (Grate) Uncensored Data; STATS Run #1 VA0090131 – '09 RE1

1/9/2009 10:39:54 AM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Lead
Chronic averaging period = 4
WLAa = 90
WLAc =
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 3
Expected Value = 5.33333
Variance = 10.24
C.V. = 0.6
97th percentile daily values = 12.9782
97th percentile 4 day average = 8.87354
97th percentile 30 day average= 6.43228
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material.

The data are:

12
2
2

*Note: STATS was not run using both censored and uncensored data for Dissolved Lead (Grate), as STATS run with uncensored data showed that a limit was not necessary. Analysis Concluded.

Dissolved Lead
Bench Sheet Data –
Outfall 001 (Plant)
Censored Data ;
STATS Run #1
VA0090131 – '09 RE1

2/20/2009 2:06:22 PM

Facility = Tyson Foods - Crewe Feedmill
Chemical = Dissolved Lead
Chronic averaging period = 4
WLAa = 90
WLAc =
Q.L. = 0.5
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 7
Expected Value = 25.5714
Variance = 235.403
C.V. = 0.6
97th percentile daily values = 62.2259
97th percentile 4 day average = 42.5454
97th percentile 30 day average= 30.8405
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

No Limit is required for this material

The data are:

2
2
5
50
50
50
20

* Note: Actual data values were "<", but entered in STATS as a real number.